

Claims

WHAT IS CLAIMED IS:

- Sub A* 7
- 5 1. A method for constructing an executable program in memory comprising the steps of:
- obtaining at least one actual system configuration parameter; and dynamically constructing at least one code bundle from a set of code modules based on the actual system configuration parameter,
- 10 wherein the set of code modules includes at least one code module associated with a first system configuration parameter and at least a second code module associated with a second system configuration parameter.
- 15 2. The method of claim 1 wherein the executable program is associated with a software driver and including the step of dynamically constructing a code bundle for every driver entry point associated with the software driver.
- 20 3. The method of claim 1 wherein the step of dynamically constructing the at least one code bundle includes adding at least one of a jump instruction and call instruction for every code bundle.
- 25 4. The method of claim 1 wherein each code bundle includes a plurality of code modules.
5. The method of claim 4 wherein the at least one actual system configuration parameter includes at least one of a dynamic configuration parameter and a static system configuration parameter and wherein the method includes the step of storing the dynamic configuration parameter or the static system configuration parameter.

Sub A^b

6. The method of claim 5 including the step of storing a library containing at least the set of code modules and a storing a database containing at least an index corresponding to actual system configuration parameters wherein actual system configuration parameters are associated with at least one code module stored in the library and wherein the step of
5 dynamically constructing at least one code bundle includes:

in response to storing dynamic configuration parameters, using indexed code modules associated with the stored dynamic configuration parameters to determine which code modules are selected to define a portion of a software driver.

10

7. The method of claim 1 wherein the dynamic code bundle defines at least a portion of a display software driver capable of assisting in rendering graphics for display on a display device.

15

DRAFT - PENDING EXAM

Sub A⁷

8. A storage device that contains programming instructions that when executed by one or more processing devices causes the one or more processing devices to:
- obtain at least one actual system configuration parameter; and
dynamically construct at least one code bundle from a set of code modules
based on the actual system configuration parameter,
wherein the set of code modules includes at least one code module
associated with a first system configuration parameter and at least a second code
module associated with a second system configuration parameter.
- 5
- 10 9. The storage device of claim 8 including stored programming instructions that when executed by one or more processing devices causes the one or more processing devices to dynamically construct a code bundle for every driver entry point associated with a software driver.
- 15 10. The storage device of claim 8 including stored programming instructions that when executed by one or more processing devices causes the one or more processing devices to dynamically construct the at least one code bundle by adding a jump instruction for every code bundle.
- 20 11. The storage device of claim 8 wherein each code bundle includes a plurality of code modules.
12. 12. The storage device of claim 11 wherein the at least one actual system configuration parameter includes at least one dynamic configuration parameter and at least one static system configuration parameter and wherein the storage device includes stored programming instructions that when executed by one or more processing devices causes the one or more processing devices to store the dynamic configuration parameter and the static system configuration parameter.
- 25
- 30 13. The storage device of claim 12 including stored programming instructions that when executed by one or more processing devices causes the one or more processing devices to

Sub A^b 7

store a library containing at least the set of code modules and store a database containing at least an index corresponding to actual system configuration parameters wherein actual system configuration parameters are associated with at least one code module stored in the library and in response to storing dynamic configuration parameters, using indexed 5 code modules associated with the stored dynamic configuration parameters to determine which code modules are selected to define a portion of a software driver.

14. The storage device of claim 8 wherein the dynamic code bundle defines at least a portion of a display software driver capable of assisting in rendering graphics for display 10 on a display device.